U.S. Patent App. No. 09/609,250 Docket: 033216.050

REMARKS

Upon entry of the amendments, claims 1, 2, 5-11, 14, and 19-31 will be pending in the application.

Applicants provide the following comments for the Examiner's consideration.

Claim Amendments

Claim 1 has been amended to specify the pressing and separating temperatures that were previously recited in claims 12 and 14. The former equation regarding $T_1 \ge T_2$ is still a part of claim 1 based on the recited temperatures. The other equation previously recited in original claim 1 has been removed and reintroduced in new claim 24.

Claim 9 has been amended to remove the equation features and to further specify the mechanism which drives the pressing and separating of the mold means at set temperatures.

Claim 12 and 13 have been canceled because the subject matter of these claims has been incorporated into claim 1.

Claim 14 has been amended to be in independent form and to include the temperature ranges set forth in Table 1.

Claim 15 has been canceled because the subject matter of this claim has been incorporated into claim 1.

Claim 16 and 17 have been canceled because of the changes to claim 9.

Claim 18 has been canceled.

New claim 19 is supported by the disclosure appearing on page 7 of the specification.

U.S. Patent App. No. 09/609,250 Docket: 033216.050

New claim 20 is supported by the disclosure appearing on page 10 of the specification.

New claim 21 is supported by the disclosure appearing on page 17 of the specification.

New claim 22 is supported by the disclosure appearing on pages 14 and 15 of the specification.

New claims 23-29 are supported by the disclosure appearing on page 12 of the specification.

Further, new claims 30 and 31 are supported by the specification and the originally filed claims.

Claim Rejections – 35 U.S.C. § 112

Claims 1, 2, and 5-17 are rejected for failing to comply with the written description requirement. Applicants respectfully request that the rejection be withdrawn because of the claim amendments.

Claims 9, 16, and 17 are rejected as indefinite. Applicants also respectfully request that this rejection be withdrawn because of the claim amendments.

Claim Rejections - 35 U.S.C. § 102

Claims 1, 2, 5, 7, 10, and 18 are rejected as anticipated by Greschner (US 5,427,599).

Applicants have carefully considered this rejection and respectfully request that the rejection be withdrawn.

Applicants dispute that the method of Greschner, which relies on higher temperatures, would anticipate the invention set forth in claim 1, which has been amended to set forth specific pressing and separating temperatures to transcribe a micro pattern. The temperature ranges set forth in Greschner do not touch upon, are not within, nor overlap the ranges set forth in claim 1.

Further, even if it could be argued that a broad enough temperature range was disclosed in the cited patent to potentially anticipate the claimed range, Applicants aver that the range set forth in Greschner lacks "sufficient specificity" to constitute anticipation. Applicants have demonstrated in the specification that unexpected results occur when the pressing temperature is up to 180°C and the separating temperature ranges from 120-150°C. Reference is generally made to the specification and to the table shown on page 13. Please note that "good results" (i.e. object transcribed at submicron accuracy, see Fig. 4) do not always occur merely because the molding temperature is higher than the separating temperature. For example, at a molding temperature of 180°C, "good results" occur when separating temperature ranges from 120-150°C and "bad results" occurred when separating temperature ranges from 80-100°C. The claimed method does not merely rely on the pressing temperature being higher than the releasing temperature as set forth in Greschner.

Hence, Applicants assert that the anticipation rejection of independent claim 1 and dependent claims 2, 5, 7, and 10 should be withdrawn (see MPEP 2131.03 regarding anticipation of ranges). The rejection of claim 18 is most in light of the claim cancellation.

Claim Rejections – 35 U.S.C. § 103

Claims 6, 8, 9, and 11-17 (pertains to claims 6, 8, 9, 11, and 14 because of the claim cancellations) are rejected as obvious in view of Greschner alone, or in combination with Kandachi or Yanagisawa.

Applicants respectfully allege that dependent claims 6 and 8 are allowable based on their dependency from claim 1.

Regarding independent claim 9, Applicants stress that the features of this claim 9 are not obvious in view of the cited prior art. The cited prior art references fail to disclose:

"a mechanism for driving at least one of the first and second mold means to press the transcription face into the base material and to separate the first mold means from the base material...wherein the mechanism presses at a temperature up to 180°C and separates at a temperature ranging from 100 to 150°C, said separating temperature being less than said pressing temperature."

The cited prior art patents fail to teach, suggest, or even hint the claimed mechanism set forth in claim 9.

Applicants urge the Examiner to withdraw the obviousness rejection of claim 11, which depends from allowable subject matter. Further, Applicants note that claim 11 recites a method of making a core of an optical component.

U.S. Patent App. No. 09/609,250 Docket: 033216.050

Regarding independent claim 14, Applicants submit that the cited prior art fails to

disclose a method that teaches pressing at 160°C and releasing at a temperature ranging

from 100-140°C, which leads to unexpected results in regards of transcription accuracy.

New Claims

New claims 18-29 are allowable because of the their dependency. Further,

Applicants contend that these claims present additional features, which are not disclosed

nor suggested in the cited prior art patents. For example, claims 23-29 provide additional

steps for manufacturing the claimed optical component and further specify the nature of

the optical component.

Applicants assert that new claims 30-31 are allowable because the cited prior art

fails to disclose or suggest the claimed method.

CONCLUSION

Applicants respectfully request that a timely Notice of Allowance be issued in this

case. If any additional fees are due in connection with the filing of this response, such as

fees under 37 C.F.R. §§ 1.16 or 1.17, please charge the fees to Deposit Account

No. 02-4300. Any overpayment can be credited to Deposit Account No. 02-4300.

Respectfully submitted,

Date: August 23, 2004

Signature:

Michael A. Makuch, Reg. No. 32,263

Smith, Gambrell & Russell, L.L.P. 1850 M Street, N.W., Suite 800

Washington, D.C. 20036

Telephone: (202) 263-4300

SGRDC/219833.1